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Papers on Philippine Birds II. The Routine of a Collector's Work

BY RICHARD C. MCGREGOR

THE routine of collecting in the Philippine Islands is necessarily somewhat different from that pursued in more temperate climates. Aside from the effects of the greater humidity and the continuous heat there are many conditions very different from those familiar to the American collector. I have thought that an account of some of these might be of interest to my California friends.

Collecting in any part of the Philippines, except near the larger towns, means camping minus the dirt and discomfort of a tent. Even on the smallest island, provided there is drinkable water present, the collector is able to find a house admirably suited to his needs, cool in hot weather, dry during the rains, and always to be preferred to a tent owing to the elevation of its floor. Even if the collector pushes into the mountains of the larger islands, away from the towns, a house can be constructed in a very short time. The framework of the native-built house is fashioned from the bamboo, or where that is lacking small trees are utilized. Spikes and nails are not needed as rattan or other vines serve to tie the framework together. A thick thatch of "cogon" grass or leaves of the nipa palm makes the house perfectly waterproof.

Cooking gear and provisions must be taken from Manila since practically nothing can be purchased in such localities as the collector cares to visit. Except in Manila, Iloilo, Cebu, Zamboango, and a few other large cities no bread is made that a white man cares to eat and the natives who serve as camp-cooks know very little about making it. Potatoes are seldom worth the trouble of carrying into the field and none can be had away from markets. In a few localities the natives raise very good camotes or sweet potatoes; in Mindoro I found them particularly fine. Rice takes the place of bread and potatoes with the islanders and I have found it convenient to use rice in the same way.

Some fresh provisions can be purchased in most islands. Bananas can be bought at from five to fifteen cents per bunch and more rarely pineapples at from two to three cents each; fresh cocoanuts for the asking. The inhabitants of coast towns fish more or less and a considerable supply is often available. As we carry a seine we get river fish by our own efforts wherever they occur. Fresh meat, in the shape of chickens, is very scarce and usually quite out of the question.

Filipinos will often trade when they will not sell. A supply of needles, thread, tools, quinine, and colored beads is always a safe addition to make when outfitting, as in barter these articles usually bring double their cost and go much better than cash. The people living in the smaller isolated islands are pitifully poor and are ill equipped with the tools and household utensils which we look upon as necessities. On my trip to Calayan Island I carried an ordinary hand saw costing a dollar in Manila; this I sold to a fellow for two dollars and within an hour he had sold it for two and a half. If I remember rightly this was the only saw in Calayan.

To the fortunate possessor of a gun, the woods and marshes yield a sure supply of game. When collecting there is no time for serious hunting, but some or all of the following birds may be killed on any of the islands with a little effort: hornbills, pigeons, megapodes, chickens, parrots, ducks, plover, snipe and rail. On the larger islands an occasional deer or wild hog adds variety to the bill of fare.

As for clothing I have found the following rig satisfactory: a light-colored cloth hat, a light, loose, sleeveless shooting coat, a blue flannel shirt, kahki panta-

loons, and heavy tan shoes. Shoes and pants are wet almost daily so I never wear socks but change to a dry rig and slippers on returning to the house. Rubber goods must be let alone unless one enjoys a continuous Turkish bath. The outfit should be light and loose whatever else it is. Neither long boots nor leg-gings are desirable except where leeches are numerous; even then thick wool stockings are the best protection.

Insect pests are few and not very troublesome. In the dryer districts and especially along the coast where the monsoons are felt one is seldom troubled with mosquitoes, but in marshy regions or in forests they are a source of danger and discomfort from dusk to daylight. Sleep is impossible without a mosquito bar. During the day mosquitoes are seldom in sight unless a curtain or hanging garment is disturbed when they fly out in a cloud. A small scorpion sometimes gets into a shoe or between the blankets and causes some excitement when discovered. They are not dangerous, their sting being about as painful as that of a bee. Probably the large scorpion of Mindanao is more venomous than the small species I have seen. In Benguet my native boys were greatly annoyed by fleas but I never felt one.

The most serious pest of the country is a worm. In the damp forests of the larger islands the ground is infested with countless leeches. The bite of these animals is not painful but it is unpleasant to feel that six to a dozen of them are sucking your blood. The wound made by a leech usually heals in a few days but it may result in an obstinate sore. Natives say that a leech pulled off the flesh leaves a bad sore, but if the leech be invited to move with the warm end of a cigar or cigarette the wound heals without trouble. As far as my experience goes this theory is correct; at any rate the moral is obvious enough. Leeches move along on the damp fallen leaves after the manner of the measuring worms (*Geometridæ*) and by means of the sucker at either extremity, attach themselves to any animal passing within their reach. The natives claim that the jar of the ground or movement of leaves and sticks notifies the leeches of the approaching victim. Ordinary cotton socks offer no obstruction whatever to leeches as they are able to pass thru the mesh; I have often seen one half-way thru a sock. High boots or heavy wool socks are the best protection.

All birds should be killed in the morning and skinned as soon as possible. Aside from the fact that they begin to slough the epidermis on the abdomen within a few hours, or even within one hour after death, there is constant danger from the ever present ant. The troublesome species is so small that an unskinned bird is often alive with ants before they are noticed. Even after specimens have been skinned they are not safe. We use corrosive sublimate solution on bill, legs, and bend of wing, and scatter naphthaline crystals in all bird boxes. The latter substance is sure death to ants.

Large skins, and in rainy weather, all skins, dry very slowly. Even in the driest weather I have found it best to put trays of drying skins in the sun for a few hours each day to prevent the growth of mould. For some time I had trouble with a colored ink which I was using on my rubber dating stamps; a few days in the sun and the lettering was faded to illegibility. I now use a black rubber stamp ink which is practically indelible.

Collecting in the afternoon is, as a rule, unsatisfactory, since it necessitates night work to save the birds. The short time between sundown and dark and the corresponding time in the morning may be utilized to advantage for collecting owls and night-hawks. Screech-owls (*Otus*) are given to perching on houses and

fences during moonlight nights and it is often worth while to hunt for them at such times.

In Calayan I found another owl (*Ninox*) perched on drift logs along the beach both night and morning. This afforded an unusually good chance to collect them, as the birds, once killed, were easily found on the beach sand.

Shore and marsh birds are to be found in the localities usually inhabited by these classes, but as few of them are of particular interest we may speak of the birds of the forest. It is in the forest that rare species are to be found.

An experienced collector begins his work by locating the flowering trees and watching them for birds. One of the most productive trees in this connection is the "dap-dap," which during the first three months of the year is covered with large scarlet flowers and these are rendered very conspicuous by the absence of the leaves which come out only after the flowers have fallen. This tree is a great favorite with many species of birds, so that with one or two small boys to retrieve specimens the collector has only to pick off the species he wishes. Parrots, fruit-thrushes, starlings, sun-birds, creepers, and flower-peckers are among the company of birds frequenting the flowering "dap-dap;" but if a number of crows begin feeding in one of these trees, few other birds will go near it.

When the "dap-dap" season is over one must look for other flower trees. The wild fig trees, of which there are a number of species, attract many birds and certain species of birds are sure to be found about the guava bushes when their yellow fruit is ripe. The very rarest birds, however, do not come to the fruit and flower trees and are to be found only thru a knowledge of their specific habits and by persistent search thru the woods.

An auxiliary barrel is not needed in routine collecting. It is, however, a very useful thing for certain small ground birds and for collecting sun-birds and flower-peckers when these birds are feeding at small flowering shrubs. At times a favorable tree or vine is found in blossom where one may sit down and kill a basketful of small birds with the auxiliary. I first observed the beautiful flower-peckers, *Dicaeum xanthopygium* and *D. retrocinctum*, feeding at blossoms so high that it took a good load of number 12 shot to bring a bird down. Later I collected them at a fig tree where many were easily taken with a .32 auxiliary. For most of our collecting we load a 12 gage shell with $2\frac{1}{2}$ drams of black powder and $\frac{1}{4}$ ounce of number 12 shot. Factory-loaded paper shells can be used if they are put up in tins in small lots, say 500, and opened only as needed. If exposed to the air for several months the wads swell and render the shells useless.

It is but fair to say a word as to the assistance received from the natives of the Philippines. In the first place we should remember the houses, already mentioned, which save the naturalist the trouble of living in a tent. These are often built away from towns and in localities favorable to the collector's work. Another important help is the numerous paths, cut thru brush and jungle, traversing the land in all directions. Without these paths it would be difficult to penetrate the undergrowth for even a short distance from the beach. The natives occasionally assist directly by the capture of birds and many rarities have come to light in this way. The only known specimen of *Callæops periophthalmica* was killed by a Filipino collector near Manila; the only specimen of the petrel family known from the Islands was caught by a native boy; the type and unique specimen of *Turnix worcesteri* was taken by native netters near Manila; *Turnix whiteheadi* is known only from market specimens, and so with many other species.

Natives have been employed as regular collectors by most recent naturalists and they are very satisfactory workers provided they are with a white man. They

possess the patience of an American Indian combined with the small boy's delight in a gun and take keen pleasure in securing new or rare birds.

Next to the leech the greatest pest is the average white man who wants to know how you kill 'em and what you do with 'em, or who insists that you are collecting for the Smithsonian "Institute"! The "little brown brothers" are quite as inquisitive but one need not understand Spanish and can forgive them as they know no better.

When once you become resigned or callous to the delays in transportation, to the slowness inherent in natives of all tropical countries, to the monotony of rice at every meal, to the lack of mail for weeks at a time, and forget the inquisitive white, you really enjoy collecting in the Philippines. To expect tomorrow what should come today and to be unruffled when the morrow does not bring it is to live happily in these islands. Mexico has been called "the land of manana"; the Philippines are the islands of *paciencia*.

Manila, P. I.

The Nuttall Sparrow Around San Francisco

BY LOUIS BOLANDER

THE Nuttall sparrow (*Zonotrichia leucophrys nuttalli*) is very plentiful around San Francisco at all times. Along canyons that have just enough brush for a cover, near the sea shore, and along wooded highways you can nearly always find this wide-awake bird. I knew of a place in the suburbs of San Francisco where they used to come and roost in a vine against the house every night. This was in January and February. There is a valley near the city called Frenchman's Valley. Here you can see this sparrow at any time; for they nest and raise their young here, finding their food in the nearby vegetable gardens. They do not fly far when followed by a person, except when he has a gun; then they disappear in all directions. They build their nests in the brush which here does not grow higher than two feet. Once in a while I find a nest built on the ground. The nests are not bulky when they are built thus. The only site where I have noted their nests as being bulky is where they build in trees, especially the young pines.

The first two nests of this species I ever found were built in pine trees about eight feet above the ground. And here the nests were very bulky. The inside lining was of light-colored soft grasses; then around this were heavier grasses of darker color; and then came a thick matting of pine needles. You could not tell the nest apart from the other bunches of needles that had caught in the crotches of the tree. The bird flew off each time as I approached the nest, and this was the only means of finding the nest. Both male and female kept up a constant chirping while I was near. Both nests contained three eggs. These nests were found in a small valley leading up from the pumping station on Lake Merced. When the nests are built in cypress trees they are generally small but not as small as those built in bushes.

The birds commence to breed about the last of March. I found one set on April 8, 1905. The eggs were deserted because of a heavy rain just a few days before, or possibly from some other cause. Within fifty feet was another nest with four half-grown young birds in it, all with their mouths open for food. The